<u>Amendments to the Specification:</u>

Please replace the Title Of The Invention with the following:

EMBEDDING IN AN INFORMATION SIGNAL A WATERMARK DEPENDENT UPON THE

BIT RATE OF THE INFORMATION SIGNAL

Please replace the paragraph [0008] with the following amended paragraph:

[0008] By selecting the embedding parameters of the watermark in dependence upon the bit-rate

of the signal, an optimal performance trade-off can be made between the watermark being robust

whilst not being significantly observable. Experimentation has shown that if a single set of

embedding parameters is [[utilised]] <u>utilized</u> irrespective of signal bit-rate, then the watermark is

more likely to be observable at low bit-rates, whilst being relatively un-robust at high bit-rates.

Please replace the paragraph [0009] with the following amended paragraph:

[0009] In another aspect, the present invention provides an apparatus arranged to embed a

watermark in an information signal, the apparatus comprising an embedding means arranged to

embed a watermark in the information signal [[utilising]] <u>utilized</u> an embedding process

controlled by at least one embedding parameter, the value of the embedding parameter being

dependent upon the bit-rate of the information signal.

Please replace the paragraph [0012] with the following amended paragraph:

[0012] In a further aspect, the present invention provides a method of detecting a watermark in an information signal, the method comprising [[analysing]] analyzing an information signal that may potentially comprise a watermark, so as to detect the watermark, the [[analysing]] analyzing process being dependent upon the bit-rate of the information signal.

Please replace the paragraph [0013] with the following amended paragraph:

[0013] In another aspect, the present invention provides an apparatus for the detection of a watermark in an information signal, the apparatus comprising [[analysing]] analyzing means arranged to [[analyse]] analyze an information signal that may potentially comprise a watermark, so as to detect the watermark, the operation of the [[analysing]] analyzing means being dependent upon the bit-rate of the information signal.

Please replace the paragraph [0022] with the following amended paragraph:

[0022] The present invention selects different watermark embedding parameter settings (including parameters that may control the type of watermarking methods [[utilised)]] utilized in dependence on the bit-rate of the information signal.

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Please replace the paragraph [0023] with the following amended paragraph:

[0023] Experimentation has shown that providing an optimal trade off between robustness and visibility for high bit-rate signals (e.g. high definition MPEG signals) is possible for certain parameter sets. However, if the same algorithm is [[utilised]] utilized with the same parameters for low bit-rate signals, the visual quality of the signal is poor. Consequently, the inventors have [[realised]] realized that rather than providing a generic parameter setting for watermarks, system performance is much improved by [[utilising]] utilizing different watermark embedding parameter settings and/or different watermarking methods depending on the bit-rate of the information signal.

Please replace the paragraph [0025] with the following amended paragraph:

[0025] A preferred embodiment of the present invention will now be described with reference to a known watermarking scheme. A single embedding algorithm is [[utilised]] utilized. The bit-rate of the information signal (in this instance, a multi media signal, in MPEG2 format) is determined, and a set of parameters selected from a predetermined group in dependence upon the determined bit-rate. Within the groups of parameters, different sets correspond to different ranges of bit-rates.

Please replace the paragraph [0026] with the following amended paragraph:

[0026] The particular embedding algorithm [[utilised]] utilized in this preferred embodiment is the run-merge algorithm described in more detail in WO 02/060182.

Please replace the paragraph [0042] with the following amended paragraph:

[0042] As can be seen, one set of parameters is [[utilised]] utilized for the high definition (HD) content at a bit-rate of 10MB/s, whilst different parameter sets are [[utilised]] utilized for respective bit-rates in the ranges 5-8MB/s and 1-5MB/s.

Please replace the paragraph [0048] with the following amended paragraph:

[0048] By appropriate selection of the different embedding parameters based upon the determined bit-rate, the trade off between the robustness and observability of a watermark within an information signal can be [[optimised]] optimized.

Please replace the paragraph [0049] with the following amended paragraph:

[0049] It will be appreciated that the above embodiment is provided by way of example only. For instance, whilst a predetermined parameter set has been [[utilised]] utilized in the preferred embodiment for each bit-rate (or range of bit-rates) considered, the parameter set could in fact be linked to the bit-rate by a predetermined algorithm.

Please replace the paragraph [0050] with the following amended paragraph:

[0050] Equally, whilst the described parameters have in the example given had an effect on the strength with which the watermark is embedded within the information signal, the embedding parameters could in fact be [[utilised]] utilized to select an appropriate watermark scheme to apply the watermark to the information signal, and/or to alter the watermark applied to the information signal. In such instances, the bit-rate will thus affect the process by which the watermark can be detected.

Please replace the paragraph [0051] with the following amended paragraph:

[0051] Figure 3 shows a watermark detector 200 in accordance with an embodiment of the present invention. In this example, it is assumed that the watermark embedding process is altered by a bit-rate dependent parameter such that different detection processes will be required for different bit-rate signals. The watermark detector 200 comprises an input 210 arranged to receive an information signal that may potentially be watermarked. Bit-rate detector 230 determines the bit-rate of the received signal to a predetermined accuracy (such a bit-rate can be determined either by [[analysing]] analyzing the signal, or by decoding a part of the signal if the bit-rate is encoded within the signal). Information on the bit-rate is then passed to the watermark parameter buffer 240, and [[utilised]] utilized to select the appropriate parameters to be used by the watermark detector 220.

Please replace the paragraph [0053] with the following amended paragraph:

[0053] It will be appreciated by the skilled person that various implementations not specifically described will be understood as falling within the scope of the present invention. For instance, whilst only the functionally of the embedding and detecting apparatus has been described, it will be appreciated that the apparatus could be [[realised]] realized as a digital circuit, an analog circuit, a computer program or a combination thereof.